PATENT ABSTRACTS OF JAPAN

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(54) PRODUCTION OF 2, 5-PIPERAZINEDIONE DERIVATIVE

(57) Abstract:

PURPOSE: To obtain the (3Z, 6Z) isomer of the titled compound having inhibition ability against blood platelet agglutination, by N-alkylating a (6Z)-4-acyl-6-alkylidene-2,5-piperazinedione and then reacting resultant compound with an aromatic aldehyde in the presence of a base.

CONSTITUTION: A (6Z)-4-acyl-6-alkylidene-2,5-piperazinedione expressed by formula I $(R^1 \text{ and } R^3 \text{ are alkyl})$ is N-alkylated to provide a (6Z)-1-alkyl-4-acyl-6- alkylidene-2,5-piperazinedione expressed by formula II $(R^2 \text{ is alkyl})$, which is then reacted with an aromatic aldehyde in the presence of a base (e.g. triethylamine) to affords a (3Z, 6Z)-1-alkyl-3-

arylmethylidene-6-alkylidene-2,5 piperazinedione expressed by formula III (Ar is aromatic group) [e.g. (3Z, 6Z)-1- N-methyl-3-benzylidene-6-isobutylidene-2,5piperazinedione].

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